



Micro Commercial Components



Micro Commercial Components  
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KTA1664-O

KTA1664-Y

## Features

- Low Collector Saturation Voltage
- Excellent current-to-gain characteristics
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

## Maximum Ratings

| Symbol     | Rating                                      | Rating      | Unit                 |
|------------|---|-------------|----------------------|
| $V_{CEO}$  | Collector-Emitter Voltage                   | -30         | V                    |
| $V_{CBO}$  | Collector-Base Voltage                      | -35         | V                    |
| $V_{EBO}$  | Emitter-Base Voltage                        | -5.0        | V                    |
| $I_C$      | Collector Current                           | -0.8        | A                    |
| $P_C$      | Collector power dissipation                 | 0.5         | W                    |
| $R_{thJA}$ | Thermal Resistance From Junction To Ambient | 250         | $^{\circ}\text{C/W}$ |
| $T_J$      | Junction Temperature                        | 150         | $^{\circ}\text{C}$   |
| $T_{STG}$  | Storage Temperature                         | -55 to +150 | $^{\circ}\text{C}$   |

## Electrical Characteristics @ 25°C Unless Otherwise Specified

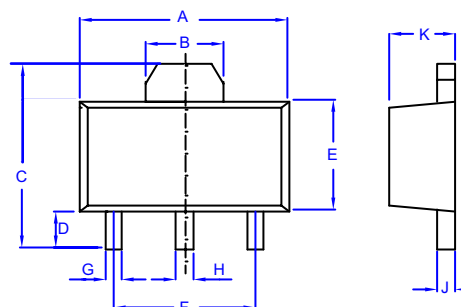
| Symbol        | Parameter  | Min  | Typ | Max  | Units           |
|---------------|--|------|-----|------|-----------------|
| $V_{(BR)CBO}$ | Collector-base Breakdown Voltage<br>( $I_C = -1\text{mA}$ , $I_E = 0$ )                        | -35  | --- | ---  | Vdc             |
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage<br>( $I_C = -10\text{mA}$ , $I_E = 0$ )                    | -30  | --- | ---  | Vdc             |
| $V_{(BR)EBO}$ | Emitter-base Breakdown Voltage<br>( $I_E = -1\text{mA}$ , $I_C = 0$ )                          | -5   | --- | ---  | Vdc             |
| $I_{CBO}$     | Collector-Base Cutoff Current<br>( $V_{CB} = -35\text{Vdc}$ , $I_E = 0$ )                      | ---  | --- | -0.1 | $\mu\text{Adc}$ |
| $I_{EBO}$     | Emitter-Base Cutoff Current<br>( $V_{EB} = -5\text{Vdc}$ , $I_C = 0$ )                         | ---  | --- | -0.1 | $\mu\text{Adc}$ |
| $h_{FE(1)}$   | DC Current Gain<br>( $I_C = -1\text{Adc}$ , $V_{CE} = -2.0\text{Vdc}$ )                        | 100  | --- | 320  | ---             |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage<br>( $I_C = -500\text{mA}$ , $I_E = -20\text{mA}$ )       | ---  | --- | -0.7 | Vdc             |
| $V_{BE}$      | Base-Emitter Voltage<br>( $I_C = -10\text{mA}$ , $V_{CE} = -1\text{Vdc}$ )                     | -0.5 | --- | -0.8 | Vdc             |
| $f_T$         | Transition Frequency<br>( $V_{CE} = -5\text{Vdc}$ , $I_C = -10\text{mA}$ )                     | ---  | 120 | ---  | MHz             |
| $C_{ob}$      | Collector output capacitance<br>( $V_{CB} = -10\text{Vdc}$ , $I_E = 0$ , $f = 1.0\text{MHz}$ ) | ---  | 19  | ---  | pF              |

## CLASSIFICATION OF H<sub>FE</sub>10

| Rank    | O       | Y       |
|---------|---------|---------|
| Range   | 100-200 | 180-390 |
| Marking | RO      | RY      |

## PNP Silicon Epitaxial Transistors

## SOT-89



1. Base
2. Collector
3. Emitter

| DIM | INCHES |      | MM   |      | NOTES |
|-----|--------|------|------|------|-------|
|     | MIN    | MAX  | MIN  | MAX  |       |
| A   | .173   | .181 | 4.39 | 4.60 |       |
| B   | .061   | ---- | 1.55 | ---- | REF.  |
| C   | .154   | .165 | 3.91 | 4.25 |       |
| D   | .031   | .039 | 0.80 | 1.00 |       |
| E   | .092   | .100 | 2.34 | 2.54 |       |
| F   | .118   | ---- | 3.00 | ---- | TYP   |
| G   | .013   | .019 | 0.33 | 0.48 |       |
| H   | .015   | .021 | 0.38 | 0.53 |       |
| J   | .015   | .016 | 0.38 | 0.41 |       |
| K   | .055   | .063 | 1.40 | 1.60 |       |

## Ordering Information :

| Device         | Packing               |
|----------------|-----------------------|
| Part Number-TP | Tape&Reel; 1Kpcs/Reel |

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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